

REMARKS

By this amendment, Applicant has amended the claims to more clearly define the invention. In particular, claim 1 has been amended to recite that the plurality of plates are alternately turned (see, e.g., Figure 2 in the description thereof in Applicant's specification) are that the flat portions and the mountain portions in the seal portions are arranged alternately in a flow direction of the flow passages. See, e.g., Figure 1. Claims 3 to 8 have been amended to clarify the invention and claims 9-13 added to define further aspects thereof. See, e.g., Figures 1-3, especially Figure 2, and the description thereof at page 5, line 25 to page 6, line 15 of Applicant's specification.

Claims 1-8 stand rejected under 35 U.S.C. 102(b) as allegedly being anticipated by U.S. Patent No. 6,478,080 to Pinto. Applicant traverses this rejection and requests reconsideration thereof.

In the first place, the Pinto patent is not prior art under 35 U.S.C 102(b) which provides that:

A person shall be entitled to a patent unless ... (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Noting that the issue date of the Pinto patent is November 12, 2002 and that Applicant's filing date in the United States is June 24, 2003, Pinto was not patented more than one year prior to the date of application for patent in the United States. Similarly, Pinto was published as U.S. Patent Publication No. US 2002/0139520 on October 3, 2002. This date is not more than one year prior to Applicant's filing date in the United States. Accordingly, the Pinto patent and its prior publication are not prior art

under 35 U.S.C 102(b).

It is noted that the Pinto patent may be available as prior art under 35 U.S.C. 102(e) as of its filing date of March 29, 2001. Should the Examiner continue to reject the claimed invention over the Pinto patent, it is requested that the statutory basis for the rejection be corrected. In this regard, it is noted that there are additional grounds for overcoming a rejection based on 35 U.S.C. 102(e) that are not available for overcoming a rejection based on 35 U.S.C. 102(b). Manual Patent Examining Procedure (MPEP) 706.02(b).

Moreover, the Pinto patent does not disclose and would not have suggested the presently claimed invention.

In the present invention, as shown by way of example only in, e.g., Figure 2, the seal portion has flat portions 5 and mountain portions 7 of which tops are formed to be flat in shape and bottoms are formed in a triangle in shape, the flat portions 5 and the mountain portions 7 being alternately arranged in a flow direction the flow passages. When a plurality of plates 1 are alternately turned and stacked on one another, the flat portions 5 and the mountain portions 7 can come into contact with each other to form a seal with a larger area. Also, with the provision of the flat portions 5 and the mountain portions 7, it is possible to stack a plurality of plates 1, e.g., more than three plates, on one another to form a plurality of adjacent flow passages so as to form a compact plate type heat exchanger. Please see the drawings attached hereto.

In contrast, in Pinto, the plates 12 and 12a do not have a seal portions having the flat portions and the mountain portions of the present invention. Therefore, it is not possible to stack three or more of the plates. Only two plates 12 and 12a can be

stacked on each other to form a flow passage therebetween.

Accordingly, the Pinto patent does not disclose the presently claimed invention.

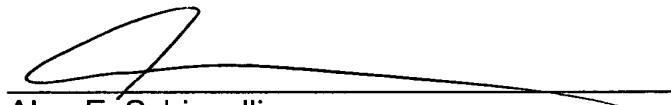
Applicant notes the Examiner has cited a number of additional documents as being pertinent to Applicant's disclosure. However, since these documents were not applied in rejecting claims formerly in the application, further discussion of these documents is deemed unnecessary.

In view of the foregoing amendments and remarks, favorable reconsideration and allowance of the claims now in the application are requested.

Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 500.42814x00), and please credit any excess fees to such deposit account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

A handwritten signature in black ink, appearing to read 'Alan E. Schiavelli', is written over a horizontal line.

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